BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

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IN THE MATTER OF THE APPLICATION OF IDAHO POWER COMPANY FOR APPROVAL OF A NEW SCHEDULE 84-NET METERING TARIFF.

CASE NO. IPC-E-01-39 ORDER NO. 28951

On November 9, 2001, Idaho Power Company (Idaho Power; Company) filed an Application with the Idaho Public Utilities Commission (Commission) requesting approval of a new tariff Schedule 84—Customer Energy Production—Net Metering. Concurrent with this filing the Company has requested the deletion of net metering option language in Schedule 86. Reference Case No. IPC-E-01-40.

By this Order the Commission approves the Company's proposed Schedule 84—Net Metering Tariff available to customers taking service under Tariff Schedules 1 (residential) and 7 (small general) who own and/or operate a generation facility that is fueled by solar, wind, biomass, or hydro power, or represents fuel cell technology, is rated at 25 kW of nameplate capacity or less, and is interconnected to the customer's individual electric system on the customer's side of the meter. We also approve setting the initial cap for the cumulative generation nameplate capacity of net metering systems (Schedules 1, 7 and future eligible schedules) at 2.9 MW.

The Commission in this Order, however, also directs the Company to make an additional filing within six weeks extending net metering eligibility to the Company's remaining customer classes. As discussed in our findings, we will expect the Company's application for those other schedules to include higher capacity allowances for customer-owned generation facilities and specific proposals for monitoring program cost, cost recovery and related issues of subsidization.

BACKGROUND

On January 22, 1997, the Commission issued Order No. 26750 authorizing Idaho Power to implement net metering as a pricing option in the Company's Tariff Schedule 86— Cogeneration and Small Power Production—Non-Firm Energy. Net metering was identified as Option B in the purchase price section of Schedule 86 and described as "offset to retail sales." In recent months, the Company states it has received input from potential net metering customers indicating that the current net metering provision of Schedule 86—Option B—is difficult to understand and cumbersome to implement. In response to those comments and in an effort to reduce the administrative requirements of computing individual monthly charges for different generating facilities and multiple customers, the Company is requesting authorization to revise its net metering provisions.

Description of Proposal

The Company is requesting approval of a net metering option that:

- a. allows the Company to use its existing billing system;
- b. allows customers to use a single meter to register the energy supplied by the Company and the energy delivered by the customers;
- c. charges customers the rate consistent with their class of service while the meter is running forward;
- d. pays customers the retail rate consistent with their class of service while the meter is running backward; and
- e. does not impose any monthly charges other than those provided for on the customers' standard service schedule.

Idaho Power is proposing that its net metering option, the proposed Schedule 84, be available to customers taking service under Schedule 1 or Schedule 7 who own and/or operate a generation facility that is fueled by solar, wind, biomass, or hydro power, or represents fuel cell technology, is rated at 25 kW of nameplate capacity or less, and is interconnected to the customer's individual electric system on the customer's side of the meter. A single meter will be utilized for the net metering service. All energy supplied by the Company to the customer will cause the meter to run forward; all energy delivered by the customer to the Company will cause the meter to run backward. If the energy supplied by the Company exceeds the energy generated by the customer during the billing period, the customer will be billed for the net amount of energy recorded on the meter at the standard Schedule 1 or Schedule 7 tariff rate, as applicable. If the energy generated by the customer will be company during the billing period, the customer will be credited for the net amount of energy delivered to the Company at the standard Schedule 1 or Schedule 7 tariff rate, as applicable.

The Company is proposing to make the net metering service under Schedule 84 available on a first come, first serve basis until the cumulative generation nameplate capacity of net metering systems connected to the Company's system equals 2.9 MW. The 2.9 MW limit

represents 1/10th of 1% of the Company's retail peak demand for year 2000. The 1/10th of 1% limit, the Company contends, is considered to be an industry standard and is identical to the limit on net metering capacity the Commission previously approved for Avista Utilities.

On November 23, 2001, the Commission issued Notices of Application and Modified Procedure in Case No. IPC-E-01-39. The deadline for filing written comments was December 21, 2001. Joint comments were filed by Renewable Northwest Project, Idaho Rivers United, the Northwest Energy Coalition, Northwest Sustainable Energy for Economic Development, Climate Solutions and American Wind Energy Association ("Renewable Energy Advocates"). Comments were also filed by Commission Staff, the Idaho Farm Bureau, the Idaho Department of Water Resources, the Idaho Rural Council and a number of the Company's customers. The comments can be summarized as follows:

Renewable Energy Advocates

The Renewable Energy Advocates request approval of the Company's Application with the following changes:

1. All customers should be eligible for net metering, not just residential and small commercial customers. The Company's proposal to restrict net metering to only small general and residential customers, they contend, is not grounded upon any cost, safety, or grid reliability justification; nor they state is there any technological or rational basis for excluding irrigation and other customers utilizing three-phase power and demand meters. Any concerns regarding metering for customers using three-phase power and demand meters, they contend, can be resolved easily through meter upgrades and interconnection reviews.

2. The single-system generating capacity limitation should be maintained at the existing 100 kW size in order to provide all customers opportunity to meaningfully offset their demand for utility-provided electricity. While the 25 kW capacity limit should be adequate for most residential and small general customers, systems of that size, they contend, will not meaningfully offset the high electric demands of irrigation and large general customers. It is requested that the Commission provide for further review of this 100 kW limitation one year from issuing its final Order to evaluate whether such limitation is appropriate.

3. The cumulative capacity for net metering, if any, should be set at 1% of the previous year's retail peak demand, and after such limit is reached, any restriction on net

metering be imposed only after the Commission's consideration of economic, environmental, and other benefits of net metering. While Avista's net metering tariffs in Northern Idaho and Washington provide for a 0.1% cumulative capacity limit, the Renewable Energy Advocates contend that other neighboring states differ. For example, Oregon places a cumulative capacity limit of 0.5% of the utility single-hour peak load, and Arizona, California, Colorado, Montana, and Wyoming each impose no cumulative capacity limitation on net metering availability.

In this time of relatively high electric prices, the Renewable Energy Advocates contend that customers should be given as many options as possible to reduce demand by generating some of their own electricity, while providing some energy to the grid. Successful implementation of a net metering program for Idaho Power, they maintain, would help to achieve many of the same benefits as increased demand side management programs—including reduced demand, increased grid reliability and efficiency, and environmental and economic benefits—all through private investment.

Idaho Farm Bureau Federation

The Farm Bureau does not understand the 2.9 MW limit the Company is seeking and representing to be the industry standard. Farm Bureau also does not understand why Irrigation Schedule 24 was omitted from eligibility. If the purpose of net metering is to allow Idaho Power customers to make use of their own renewable energy resources, the Farm Bureau contends that the Company's filing is too limiting. Many irrigation customers use more than 25 kW which is the limit for customers proposed in this rule. The Farm Bureau requests that there not be an upper limit, for most of the large irrigators exceed the 25 kW limit and almost all dairies have 1,000 cows or more and will exceed the limit if they go to bio-generation.

Idaho, the Farm Bureau states, is a rapidly growing state with dairies now the largest agricultural industry in the state. Environmentally, large dairies, it contends, are having trouble handling waste and are under immense pressure to improve waste management. One of the innovative ways they can handle waste and mostly eliminate lagoon odors is to divert the waste to bio-generators that convert the waste to methane that is burned and drives turbines that generate electricity. Net metering, the Farm Bureau contends, would drive this process and is severely needed.

The Idaho Farm Bureau also recommends that the Commission establish guidelines and rules to support net metering on a yearly basis. It is noted that Idaho Power only discusses

monthly net metering, but most cogeneration facilities need consideration for both the productive months and less productive months to be accounted on a yearly basis.

Commission Staff

Staff recommends that the Commission approve Idaho Power's proposed new Schedule 84 with the following changes:

- 1. Staff recommends that net metering be made available to all customer classes.
- 2. Staff recommends that demand metered customers desiring to participate in net metering (irrigation, large commercial and industrial) be required to pay any additional costs associated with installing additional metering equipment necessary for net metering.
- 3. Staff recommends that demand metered customers, if allowed to participate in net metering, be credited for the energy they produce at the energy rate applicable to the tariff under which the customer is currently served.

Staff contends that the Company's proposal to credit customer generators at full retail rates will pay customers more than the actual value of the generation. Consider, for example, it states, an instance in which a residential net metering customer completely offsets his entire usage during the month. The customer would pay only a basic customer charge (\$2.51). Idaho Power would collect no revenue from the sale of kilowatt hours. With only the revenue from the customer charge, Idaho Power cannot recover its full cost of providing service. To provide service, Idaho Power must still have distribution plant in place (poles, wires, transformers, etc.), they must still read meters and send bills, and they still have administrative costs. According to Idaho Power's unbundling report for 1999, of the approximately 4.9¢/kWh (exclusive of PCA surcharge) total cost for residential and small customers, generation costs account for 2.47¢/kWh, transmission 0.29¢/kWh, distribution facilities 1.38¢/kWh, and the remaining 0.8¢/kWh is for meter reading, billing, and other general and administrative costs. Net metering allows Idaho Power to avoid some generation costs and perhaps some transmission costs, but few, if any, other costs. Under Idaho Power's current Schedule 86 net metering tariff, the credit allowed for customer generation is discounted to account for this. However, under the proposed simplified new Schedule 84 tariff, customer generation is not credited based on the avoided cost of generation and transmission, but at the full retail rate.

Staff also notes that energy offered to customers by Idaho Power is firm. Net generation, on the other hand, is provided by customers to Idaho Power on a non-firm basis. While there has always been a difference in the value of firm versus non-firm energy, Staff notes that this difference is not recognized under Idaho Power's Schedule 84 proposal.

Despite Staff's concerns that some of the costs to serve net metering customers will be subsidized by other customers, the overall dollar impacts of net metering, Staff contends, will be small if participation levels are restricted. Staff believes that Idaho Power's proposal to limit the maximum size of individual installations to a capacity of 25 kW and the maximum collective capacity of net metering generation on the Company's system to 2.9 MW is reasonable. These participation limits, Staff notes, are the same as the limits approved for Avista's net metering tariff.

Staff notes that under Idaho Power's existing Schedule 86 net metering rules, which have been in place since 1983, the Company has attracted only three net metering customers, two of which were connected in the past six months. Staff believes that if and when there is 2.9 MW of net metering on Idaho Power's system, a more accurate cost based rate should be established.

Under Idaho Power's proposal, net metering will be restricted to Schedule 1 and Schedule 7 customers only (residential and small commercial). While it is true, Staff concedes, that a second meter or a more sophisticated meter may be required for demand metered customers, Staff believes that demand metered customers should be allowed to participate in net metering. Staff contends that it would be reasonable to require such customers to pay additional costs to cover necessary meter modifications or additions. Staff proposes that demand meter customers be only credited for generation at the energy rate of the schedule under which the customer is served.

While critical of some aspects of the Company's proposal, Staff generally supports net metering. Net metering, it states, helps support the continuing development of renewable energy resources. It also helps to advance energy generation technology and may offer environmental benefits.

Department of Water Resources - Energy Division

The Department of Water Resources – Energy Division recommends modification of the proposed Schedule 84 net metering tariff in three areas: 1) Eligible customer classes, 2) individual project size limit and 3) total Idaho Power system limit.

1. Eligible Customers

Idaho Power's net metering tariff proposal is only available to Schedule 1 (residential) and Schedule 7 (small general service) customers. The Department of Water Resources notes that net metering also has potential application for the agricultural sector. Dairy operations with anaerobic digestion systems can potentially produce power from methane. There are also wind power opportunities. Typically, these agricultural users, the Department notes, fall under Idaho Power's Schedule 9 (large general service) and Schedule 24 (irrigation service). The net metering proposal excludes these classes. The Department recommends inclusion of these customer classes for Schedule 84 tariff eligibility.

2. System Size Limitation

For residential (Schedule 1) and small commercial sectors (Schedule 7) the Department believes the 25 kW nameplate capacity size limitation to be appropriate.

For other tariffs (e.g., irrigation), the Department believes it should be set higher than 25 kW. For example, it states, some aggregated irrigation loads could be as high as 8,000 kW. The average size of irrigation pump tested by Idaho Energy Division in previous years within the Idaho Power service area is approximately 150 horsepower (112 kW).

Additionally, the Department contends that the size limit of 25 kW has no relevance to economies of scale for wind power generation. The cost per unit of rated output for a 25 kW turbine can be as much as three times the cost for a 660 kW turbine. Wind power generation at the larger scales compatible with electricity loads of Idaho irrigators, the Company contends, are more likely to be cost effective. The Department recommends that consideration of a larger size limit for customers not in Schedules 1 and 7 be investigated.

3. Limit on Overall Enrollment

Idaho Power is proposing a net metering service available on a first-come, first-serve basis until the cumulative generation nameplate capacity connected equals 2.9 MW. The Department recommends that the Commission stipulate that when this limit is reached, it should be reviewed to determine if it should be raised.

Idaho Rural Council

The Idaho Rural Council (IRC) supports a viable net metering program for all Idaho utilities. Such a program, it contends, will promote distributed and sustainable alternative forms of electrical production such as small-scale wind, photovoltaic and small-scale hydro and will be

the size of eligible generating facilities and (3) increasing the cumulative generating capacit limit. The Company offers the following arguments.

Expanding access to net metering as proposed by many commenters, the Company contends, would result in additional costs being shifted to non-participants and could result in unacceptable levels of subsidy. The Company notes that in its Application it is attempting to eliminate some of the calculation net metering charge complexity existing under Schedule 86 Option B. The Company recognizes that in simplifying the computation of charges to net metering customers, some subsidy will result. However, the Company contends that so long as the eligibility for net metering is limited to small (25 kW and less) projects, projects utilizing watt-hour meters and is capped at a reasonable level (2.9 MW), this subsidy would be limited to a reasonable level and would be partially offset by savings resulting from the simplification of the net metering program.

Increasing program eligibility should not be done, the Company maintains, without considering the potential differential between a net metering purchase price at a retail sales rate

and the wholesale cost of alternative power supplies. Also to be considered the Company notes, is that power purchased under net metering is non-firm energy and is of less value for meeting system loads than would be an alternative wholesale purchase of firm energy. Idaho Power recommends that the net metering be limited to Schedules 1 and 7 and

generators smaller than 25 kW. Idaho Power believes that the primary purpose of net metering is to allow customers to realize the value of their generation by directly and immediately offsetting their energy consumption, with any excess generation delivered to Idaho Power causing the inexpensive watt-hour meter already in place to run backwards or "net" their recorded consumption against their excess generation. Demand metered customers, the Company contends, will also be able to directly and immediately offset their consumption with their own generation if they so choose. However, because the existing meters and meter bases of demand metered customers cannot "run backwards", they would have to be modified and/or replaced to record any excess generation delivered to Idaho Power. It makes no sense, the Company contends, to increase the net ORDER NO. 28951

of significant economic benefit to the rural economies of Idaho. Beyond that, it contends, there

are environmental benefits to all Idaho citizens that come from reducing the need for and demand on centralized electrical production. The Idaho Rural Council is opposed to a system-wide net metering capacity limit.

There should be no limit, it contends. Distributed/alternative production, it states, should be encouraged not inhibited..

Other Customer Comments

following excerpts:

- Other comments received from Idaho Power customers address areas reflected by the • I would like to net meter and install a solar system from my private house

 - I think that the cap of 2.9 MW is way too low, and that the reconciliation should take place on an annual basis rather than monthly so that irrigators
 - may benefit from the program. • Please do not let Idaho Power put these kinds of limits on the amount of
- electricity that can be produced by alternative energy sources. • I strongly object to the ".1%" rule of thumb. I believe we as Idahoans

need to set the standard to which others can look. Idaho has a vast natural resource of wind, water, and solar energy just wasting away because of restrictions. My humble little wind farm is a classic example. The utility company (Idaho Power) wants so much to hook up that I am forced to "dump" my excess, or "shut down", rather than offer it to the other power users in our area. Perhaps the powers that be could consider reaching out to us, the private and/or remote power providers to help each

Idaho Power Reply Comments

Idaho Power prefaces its remarks by noting that the Company is currently purchasing approximately 100 aMW of energy from 67 small generating facilities pursuant to the Public Utility Regulatory Policies Act of 1978 (PURPA). Developers of renewable generation resources, it states, have the present ability to obtain firm or non-firm energy purchase contracts. No customer, it contends, is precluded for offsetting its load by its own generation, even if net metering is not involved.

Idaho Power contends that its Schedule 84 Application should be approved without modification. The Company opposes (1) expansion of eligible customer classes, (2) increasing ORDER NO. 28951

metering subsidy and pay full retail rates for what clearly is separately metered and can be paid at non-firm Schedule 86 rates or negotiated firm contract rates. Including customers with demand meters and with facilities greater than 25 kW in net metering programs, the Company contends, would require modification of the Company's billing system and the expenditure of additional programming costs to allow the Company to bill for the energy consumed, the energy generated and delivered to Idaho Power, and the computed difference. Requiring these additional expenditures, the Company maintains, is inconsistent with the idea of net metering as a simple, cost-effective program that directly and immediately compensates customers for their generation but does not impose additional costs on customers that do not choose to develop generation facilities.

In addition to the potential for increasing non-generating customer costs, the Company contends that expanding eligibility for net metering to generating facilities greater than 25 kW will require that net metering projects be subject to individual analysis of interconnection requirements to avoid adverse impacts on system safety and service quality.

3. Cumulative Generation Capacity Limit

Recognizing that the magnitude of cost shifting will increase with the increase in the level of net metering generation purchases, Idaho Power urges the Commission to retain its proposed 2.9 MW generation capacity limit.

COMMISSION FINDINGS

Idaho Power in this case is requesting approval of a new net metering tariff— Schedule 84. The more controversial features of the proposal are (1) limiting eligibility to Schedules 1 and 7, (2) limiting the size of a customer's generation facility to 25 kilowatt nameplate capacity, and (3) setting a cap on cumulative purchases at 2.9 MW. The Commission has reviewed the comments filed by Renewable Energy Advocates, a group of six organizations, the Idaho Farm Bureau, the Idaho Department of Water Resources, the Idaho Rural Council, Commission Staff and a number of interested customers. The Commission continues to find it reasonable to process this case pursuant to Modified Procedure. Reference IDAPA 31.01.01.204.

All commenters and this Commission support increased opportunities for distributed/alternative and renewable electric energy production. The Company is to be

commended for its proposal to simplify its current Schedule 86 net metering procedures. Commenters recommend the following changes to the Company's proposed tariff:

1. That tariff eligibility be extended to all customers, including Schedule 24 Irrigators and Schedule 9 Large General Service Customers.

We Find: The Commission finds the Company's Schedule 84 proposal to be a good first step. The Commission finds, however, that all customers should be provided the opportunity to participate in net metering, including three-phase systems and demand metered customers. The Company notes that developers of renewable generation resources have the present ability under PURPA to obtain firm or non-firm energy purchase contracts. While we acknowledge that opportunity, we believe that the primary thrust of net metering is to provide customers the opportunity to offset their own load and energy requirements. We find that customers should be permitted the opportunity to participate in net metering in addition to available firm or non-firm contract options. The Company also notes that the meters and meter bases of demand metered customers cannot run backwards. Extending the program to such customers will entail additional costs. We request that the Company present a net metering proposal for its other customer classes within six weeks. It is reasonable that such a program require demand metered customers to pay the cost of any additional equipment necessary for their participation.

2. That the proposed nameplate capacity of the customer-owned generation facility be increased beyond the proposed 25 kW.

We Find: The Commission notes that the Company raises potential safety, service quality and grid reliability concerns arising from an increase in facility size beyond 25 kW nameplate capacity. We find that the proposed 25 kW limit is a reasonable size for Schedule 1 residential and Schedule 7 small general service customers. We find that the 25 kW capacity limit, however, is unreasonably low should net metering be extended to those customer classes with greater energy demands. Based on the comments filed, we find a more reasonable limit for irrigators, dairies and other customer classes is in the range between 100 to 125 kW. We note that in the Company's present Schedule 86 tariff, the capacity size limit is 100 kW. In the filing we have requested, we expect the Company to address its safety, service quality and grid reliability concerns and to offer proposed solutions. The Company may find it useful to

investigate how these concerns are addressed in other states with larger net metering capacity limits for customer-owned generation. As part of its filing we ask the Company to make specific proposals for monitoring program cost, cost recovery and related issues of subsidization.

3. That the cumulative generation nameplate capacity of net metering systems be increased beyond 2.9 MW or one-tenth of 1% of prior year's retail peak demand.

We find: The Commission finds that the proposed 2.9 MW cap for cumulative generation nameplate capacity is a reasonable initial cap for net metering for Schedules 1, 7 and all future eligible schedules. We also find it reasonable that the cumulative capacity limit be reviewed after that limit is reached. As part of that review, we expect a report regarding the required level of subsidization by non-participants. The Commission recognizes that in the program we approve today for Schedules 1 and 7 customers, the full cost of the program may not be born by participants. Raising the cap, we realize, increases the level of subsidization. As part of its report, the Company should provide the differential between the net metering purchase price it pays at retail sales rates and the wholesale cost of alternative power supplies. We also expect further information regarding cost shifting and the Company's ability to recover customer costs from program participants.

CONCLUSIONS OF LAW

The Idaho Public Utilities Commission has jurisdiction over this Application and Idaho Power Company, an electric utility, pursuant to Title 61 of the Idaho Code and the Commission's Rules of Procedure, IDAPA 31.01.01.000 et seq.

ORDER

In consideration of the foregoing and as more particularly described and qualified above, IT IS HEREBY ORDERED and the Commission does hereby approve the Company proposed Schedule 84—Customer Energy Production—Net Metering Tariff for Schedule 1 (residential) and Schedule 7 (small commercial) customers effective the date of this Order.

IT IS FURTHER ORDERED and the Commission directs Idaho Power Company to file an Application on or prior to Friday, March 29, 2002, with a net metering proposal for the Company's other tariff schedule classes and specific proposals for monitoring program cost, cost recovery and related issues of subsidization.

THIS IS A FINAL ORDER. Any person interested in this Order may petition for reconsideration within twenty-one (21) days of the service date of this order with regard to any matter decided in this Order. Within seven (7) days after any person has petitioned for reconsideration, any other person may cross-petition for reconsideration. See Idaho Code § 61-626.

DONE by Order of the Idaho Public Utilities Commission at Boise, Idaho this $/3^{\cancel{4}}$ day of February 2002.

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PAUL KJELLANDER, PRESIDENT

H. SM COMMISSIONER

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ATTEST:

Commission Secretary

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